## **Land Warrior System Increases Mission Speed and Decreases Risks**

## **Improved Situational Awareness Helps Prevent Fratricide**

By Debi Dawson

For 15 months starting in April 2007, the Soldiers of the 4th Brigade, 9th IR faced the challenges of asymmetrical warfare head on, thanks to the Land Warrior system, a Soldier-worn computer that increases mission speed and effectiveness and decreases risks

Land Warrior digitally links Soldiers on the battlefield.

"A platoon that has Land Warrior can cover a lot more ground a lot faster," said SSG James Young, a weapons squad leader with Alpha Company.

Land Warrior is a modular fighting system that uses state-ofthe-art computer, communications and global positioning technologies to digitally link Soldiers on the battlefield. The system, which is managed by Program Executive Office (PEO) Soldier's Product Manager Ground Soldier, is integrated with the Soldier's body armor and has a helmet-mounted display.

"The system gives four distinct advantages that other Soldiers do not have," said CSM Phil Pich of the 4-9 "It gives you situational awareness, which allows you to see all blue [friendly] forces that are in your area of operations. It gives you maps and imagery, so I can see down to 1-meter imagery or I can go back to any size map that I want. It also allows the leaders to change graphics while on the move. And it gives us voice and text messaging capabilities."

In addition to detailed maps, the system can store execution checklists, more than 600 images, including photographs of targets and other mission information. The Soldier views the maps and imagery through the helmet-mounted display, which is pulled down over one eye when needed. Each Soldier wearing the system

is represented by an icon on the map. Using drop-down menus, team leaders and commanders can place virtual icons, or "chem lights" onto a map, identifying enemy locations or other essential information. These icons populate the maps of all Soldiers linked to the network.

> The system allows leaders to quickly relay information in the middle of a mission. Pich described a raid in Taji, Iraq, during which Soldiers came across a large canal they had to cross: "With that obstacle, typically you'll have your entire platoon stagnant in a security hold. Here they were able to find a crossing point, mark it and then continue moving right into the assault, so people didn't have to have escorts come back from the lead element and bring them up to the location. They were able to drop a virtual chem light to the crossing point. They were able to move directly to it and directly into the assault."

Pich said that such unexpected changes in mission can increase the risk of fratricide because support-by-fire teams don't know where all of their friendly forces are. "Now the leader on the support-by-fire is able to see his front line trace of the other element that's moving," Pich said.

Continuing challenges of asymmetrical warfare call for continuing technological developments for the U.S. Soldier. To coincide with the Army's decision to accelerate the delivery of Future Combat Systems equipment, the Army has announced the Ground Soldier System (GSS), which will emerge from Land Warrior and is arriving in 2010. The system provides unparalleled situational awareness to the dismounted Soldier, allowing for faster and more accurate decisions in the tactical fight. Weighing in at only 7.2 pounds and containing only two major subsystems, GSS is significantly lighter than its predecessors.

"Land Warrior provides a sense of comfort in reducing the fratricide potential, especially when there are so many units moving in and out of the battlefield," said CPT Mike Williams, Commander of Alpha Company. "Everyone knows where everyone else is on the battlefield and everyone knows where everyone else's direct fire is."

For more information on Land Warrior, Ground Soldier System or PEO Soldier, please visit www.peosoldier.army.mil or contact Debi Dawson, strategic communications officer for PEO Soldier, at (703) 704-2802.

